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(54) **LIQUID BARRIER ASSEMBLY AND CONNECTOR THEREFOR**

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See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,869,617	A *	9/1989	Chiodo	404/6
6,059,491	A *	5/2000	Striefel et al.	405/111
6,588,979	B1 *	7/2003	Pasij	405/114
2004/0190993	A1 *	9/2004	Archer-Simms et al.	405/110

* cited by examiner

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(57) **ABSTRACT**

The present invention relates to a liquid barrier assembly (1) comprising at least two barriers (2,3) each comprising a substantially rigid container and a front wall (5) against which liquid is intended to be incident. Adjacent barriers (2,3) are linked by a connector (12) which comprises a first relatively rigid portion (13) and a second relatively deformable portion (15). The portions (13, 15) are received in respective recesses defined in neighbouring side walls of adjacent barriers (2,3). The second portion (15) is deformed upon juxtaposition of adjacent barriers (2,3) in a predetermined manner so as to form an effective water-tight seal between the barriers (2,3).

20 Claims, 5 Drawing Sheets

